# MONDAY WEEK 9 _____ MATH PRACTICE

Name

1. The hula hoop was one of the hottest fads in the U.S. during the 1950s. This fun new toy sold as fast as 20,000 a day for a while. This number can be written as
   - ○ $(\sqrt{10{,}000})\ (2 \times 10^3)$
   - ○ $5(40^3)$
   - ○ $2(10^4)\ (1^2)$

2. Write **6,240,000,000** in scientific notation.

3. Which of these—4, 5, 6, 7, or 8—is the solution to the number sentence below?

   $(9 \cdot x) + 12 = (12 \cdot x) - 6$

4. Solve:

   $-8w = -80$

5. In 1957, the Wham-O Company sold 25 million hula hoops in two months. Assume that each of those two months had 31 days, and use **h** to represent an hour. Which equation(s) can be used to find the number of hula hoops sold in an hour?

   a. $\frac{4 \cdot 7 \cdot 24}{25{,}000{,}000} = h$

   b. $h(2 \cdot 31 \cdot 24) = 25{,}000{,}000$

   c. $1488h = 25{,}000{,}000$

   d. $25{,}000{,}000h = 2 \cdot 24 \cdot 31$

# TUESDAY WEEK 9 _____ MATH PRACTICE

Name

1. Write a number sentence to show the Identity Property for Multiplication.

2. One of the most interesting fads of the 1920s was flagpole sitting. A record-holder sat on top of a flagpole for 49 days. In minutes, this is closest to

   a. $(30^3)\ (2^4)$ min  c. $42^3$ min

   b. $(16^4) + (8^4)$ min  d. $(25^3)\ (-2^2)$

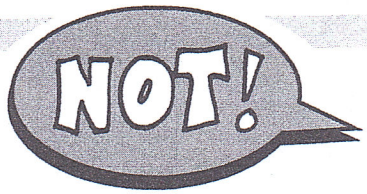
3. Write the expression in words:

   $(-7 + 3)\sqrt[3]{343}$

4. Which is the value of x in the equation below: **12**, $\frac{1}{2}$, **4**, or **3**?

   $\left(\frac{6}{x}\right)\left(\frac{1}{2}\right) = \frac{3}{4}$

5. A fad involving the use of a simple word grew fast in the 1980's. It is still quite popular today. People "negate" an idea by saying it, then adding the word . . .




**If you drew one letter of the alphabet at random...**

a. What is the probability of drawing a letter in the word?

b. What is the probability of drawing a letter not in the word?

c. With three consecutive drawings, what is the probability of drawing all three letters in the word?

# WEDNESDAY WEEK 9 _____ MATH PRACTICE

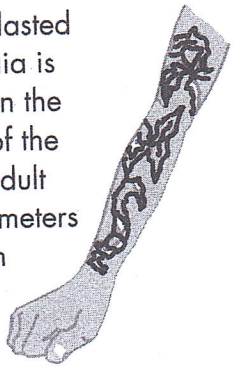
Name

1. Is the solution correct?

$$\frac{35 - y}{5} + 2y = -4$$
$$y = -10$$

2. Simplify: $3x^5 + 6x^5 + (-12x^5)$

3. Getting tattooed is a fad that has lasted for centuries. Lucky Rich of Australia is one of the most tattooed persons in the world. He has tattoos on 99.9% of the surface of his skin. The average adult human body has about 2 square meters of skin covering. About how much surface on Lucky's body is not covered with tattoos?



4. Identify the *like* terms in this expression.

$4b^2 + 3c - 6c - 6b - 2b^2$

5. One of the hottest fads of the 1950s was telephone booth stuffing. The challenge in this activity was to see how many people could fit into a phone booth at one time. Write an equation and use it to solve the problem below.

One group that got stuffed into a phone booth included 18 adults and 9 children. Each child took up $\frac{2}{3}$ the space of an adult. The phone booth was 2.8 feet wide and 2.8 feet deep with a height of 6.9 feet. Approximately how much space was occupied by each adult?

# THURSDAY WEEK 9 _____ MATH PRACTICE

Name

1. Simplify: $\sqrt[6]{64}$

2. The popularity of the Slinky toy (a 1940s fad) has lasted for decades. It is an 87-foot length of wire wrapped in 3-inch diameter circular coils.

**Is there enough information given above to estimate the number of coils in a Slinky?**

3. Simplify: $5(n - 3) - 3(2 + n) - (n + 7)$

4. Write the reciprocal of each:

$-8$ $\quad 3X \quad X-2$

$\frac{5}{4} \quad \frac{-X}{5} \quad 3\frac{1}{3}$

**Beanie Babies**

Beanie Babies became wildly popular in the 1990s. The craze was fueled when MacDonald's restaurants included one of the toys in every Happy Meal. When the restaurant chain started this practice, 100 million were sold in a matter of a few days. The average number of sales for each of those days was 7,142,857.

5. Which equation will find the number of days to reach sales of 100 million?

**a. $7{,}142{,}857x = 100{,}000{,}000$**

**b. $100{,}000{,}000x = 7{,}142{,}857$**

**c. $\frac{x}{100{,}000{,}000} = 7{,}142{,}857$**

1. Drive-in movies were popular in the 1930s and 1940s. In 1933, there were 100 drive-in theaters in the U.S. By 1945, there were 2,200. What was the percent of increase from 1933 to 1945?

2. Which operation should be done *last*?

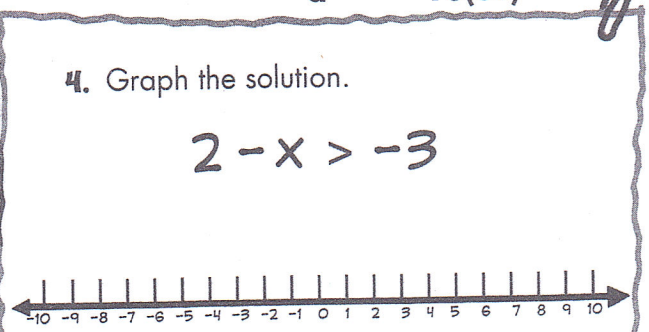
$$(12 - 7)4 + 5^3 - 16 + 3(10 + 3)$$

3. Which has the least value?
*(In all expressions, **d = 100** and **c = 10**.)*

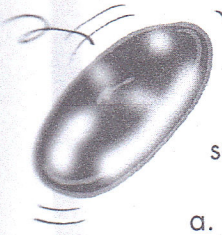
$c(d + c)$ $\quad \frac{10c}{d}$ $\quad \frac{d}{10(5c)}$

4. Graph the solution.

$$2 - x > -3$$




## 5. Challenge Problem



The "Flying Saucer" toy, as it was first known, was a huge fad in the 1950s. It was renamed Frisbee and has sold over 200 million in the past 50 years. Use the formula **rt = d** *(rate times time equals distance)* or one of its variations to solve the following problems about the flying toy.

a. Zack threw his Frisbee. It traveled 70 feet in 44 seconds. What is the rate in feet per second?

b. Zola's Frisbee traveled a distance of 143 feet at a rate of 2.2 feet per second. How long did this take?

c. One toss by Zelda sent a Frisbee flying for 110 seconds at 1.6 feet per second. Zeke tossed his Frisbee at the same time. It traveled 2.5 feet per second for 85 seconds. What is the difference in the distance covered by the two Frisbees?

d. Z. Z.'s Frisbee flew at a rate of 3 feet per second for a distance of 58.5 feet. How much time did it fly?

e. Mom, competing with her four kids, threw a fantastic toss. Her Frisbee flew 609 feet. It was airborne for 145 seconds. What was the rate of travel?

f. A crate of Frisbees traveled on a plane flying from Boston to Miami. The plane left the ground at 11:52 a.m. and landed (in the same time zone) at 3:04 p.m. The plane traveled at a rate of 393 miles per hour. What is the distance between Boston and Miami (rounded to the nearest mile)?